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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/034,130	01/03/2002	Tsutomu Kawakatsu	0303-0457P	1616

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BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

BINDA, GREGORY JOHN

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 09/17/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/034,130

Applicant(s)

KAWAKATSU ET AL.

Examiner

Greg Binda

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) 4-12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 13-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Election/Restrictions

2. Claims 4-12 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election of Species I (Figures 1-10) was made **without** traverse in Paper No. 7.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 1-3 & 13-19 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has not pointed out where in the specification the following limitations are supported, nor does there appear to be a written description of the limitations in the description of the elected species in the application as originally filed.

- a. Claim 1, lines 10 & 11 and claim 19, line 2: “an entire circumferential edge of said cutout surface being in contact with said spherical surface”

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- b. Claim 13, line 2 and claim 15, line 11: “a non-circular opening”
- c. Claim 13, line 3 and claim 15, line 12: “a non-spherical interior cutout surface”
- d. Claim 13, lines 3 & 4: “said interior cutout surface being in contact with said spherical recess”
- e. Claim 14, line 2 and claim 16, line 2: “an elliptical opening”
- f. Claim 14, line 3 and claim 16, line 3: “an elliptical surface”

Claim Rejections - 35 USC § 102

5. Claims 15, 17 & 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Turner et al, WO 90/07067 (Turner). Figs. 1-3 show a constant velocity universal joint comprising: a cylindrical outer member 11 connected to a transmission shaft (nominally indicated by numeral 17 in Fig. 1), the outer member 11 having guide grooves 20 separated from each other by a predetermined spacing distance and extending in an axial direction on an inner circumferential surface of the outer member 11; and an inner member 10 connected to another transmission shaft 9, the inner member 10 being inserted into an opening in the outer member 11, the inner member 10 including trunnions 14 each having a spherical surface 15 and annular members 22 each having a spherical recess 23 adapted to receive the spherical surface 15, wherein a pair of opposite flat surfaces 16 are formed on the spherical surface 15 to which no torque is applied. Fig. 3 shows each annular member 22 comprises a non-circular opening 30 & 27, the non-circular opening comprising a non-spherical interior cutout surface 27 in contact with the spherical recess 23.

6. Claims 15, 17 & 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsumoto et al, US 5,256,107 (Matsumoto). Figs. 1-3 show a constant velocity universal joint comprising: a cylindrical outer member 22 connected to a transmission shaft 20, the outer member 22 having guide grooves 34 separated from each other by a predetermined spacing distance (see also col. 6, line 45) and extending in an axial direction on an inner circumferential surface of the outer member 22; and an inner member 26 connected to another transmission shaft 24, the inner member 26 being inserted into an opening in the outer member 22, the inner member 26 including trunnions 28 each having a spherical surface 29 and annular members 30 each having a spherical recess 31 adapted to receive the spherical surface 31, wherein a pair of opposite flat surfaces 40 are formed on the spherical surface 31 to which no torque is applied. Fig. 3 shows each annular member 30 comprises a non-circular opening 38, 39, the non-circular opening comprising a non-spherical interior cutout surface 38, 39 in contact with the spherical recess 31.

7. Claims 15-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizukoshi, US 5,069,653. Figs. 1-4 show a constant velocity universal joint comprising: a cylindrical outer member 1 connected to a transmission shaft (see col. 3, line 25), the outer member 1 having guide grooves 2 separated from each other by a predetermined spacing distance (see also col. 3, line 22) and extending in an axial direction on an inner circumferential surface of the outer member 1; and an inner member 3 connected to another transmission shaft (see col. 3, line 28), the inner member 3 being inserted into an opening in the outer member 1, the inner member 3 including trunnions 4 each having a spherical surface 11 and annular members 7 each having a

spherical recess 13 adapted to receive the spherical surface 11, wherein a pair of opposite flat surfaces 12 are formed on the spherical surface 11 to which no torque is applied. In col. 2, lines 50-55, Mizukoshi discloses each annular member 7 comprises an oval (i.e. elliptical) opening/surface 14 that Figs. 4 & 5 show in contact with the spherical recess 13.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. *Merriam-Webster* discloses that "oval" and "ellipse" are synonymous terms.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Greg Binda whose telephone number is (703) 305-2869. The examiner can normally be reached Monday through Thursday from 9:30 am to 7:00 pm. The examiner can also be reached on alternate Fridays. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne, can be reached on (703) 308-1159. The fax phone number is (703) 872-9306. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.



Greg Binda
Primary Examiner
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